

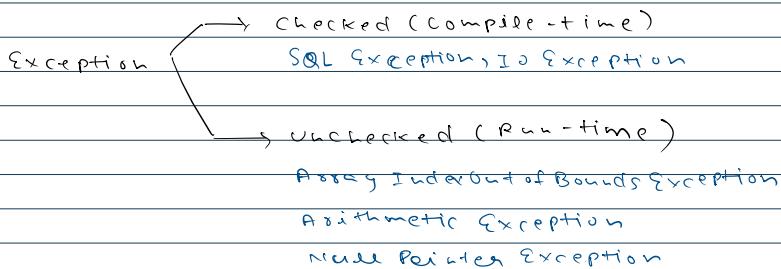
Exception Handling

Exception

An exception is an unwanted or unexpected event, that disrupts the normal flow of program.

Exception vs Exception

Notes



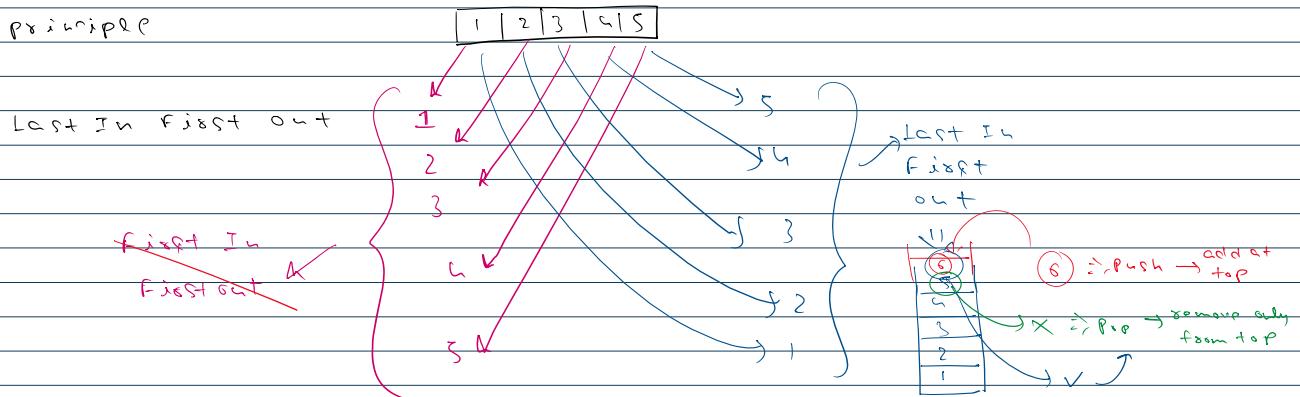
Java Exception keywords

try
catch
finally
throw
throws

Stack

1, 2, 3, 4, 5

LIFO principle



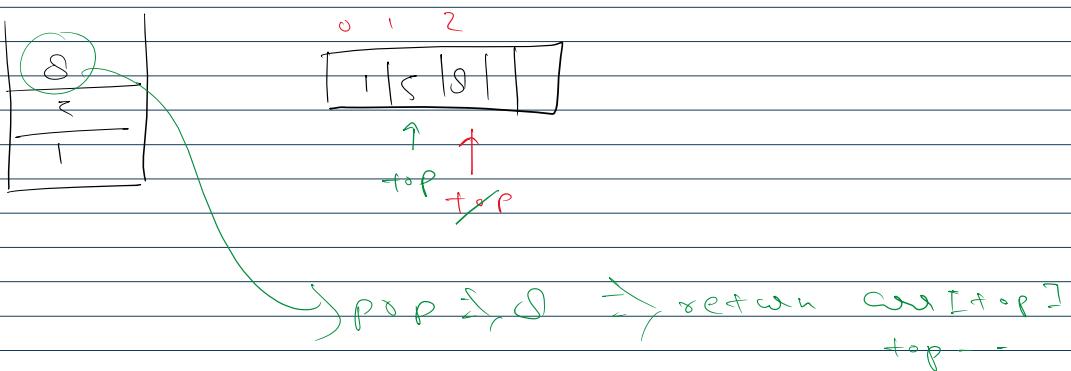
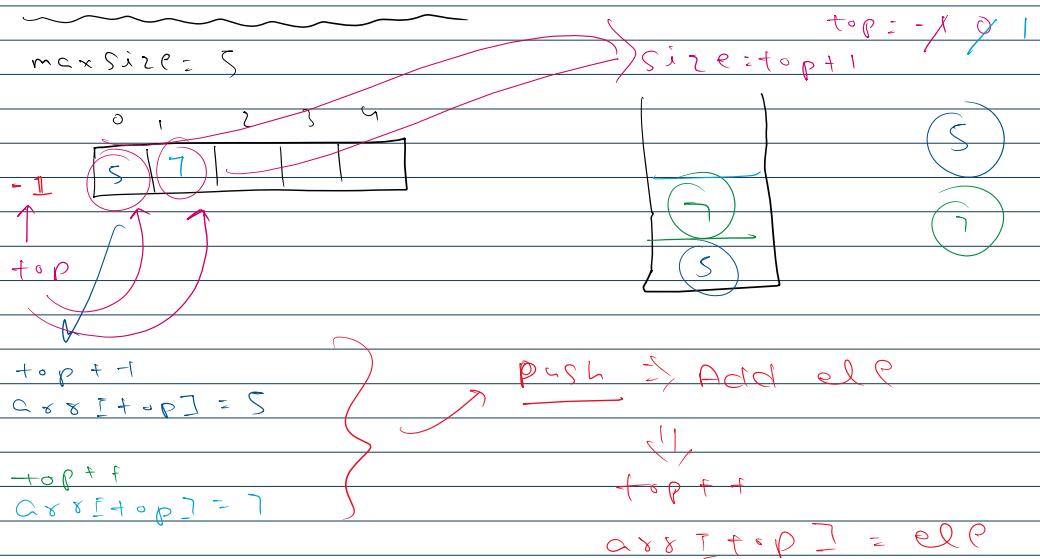
Operations

- push
- pop
- peek / top
- isEmpty

Stack Implementation

maxSize = 5

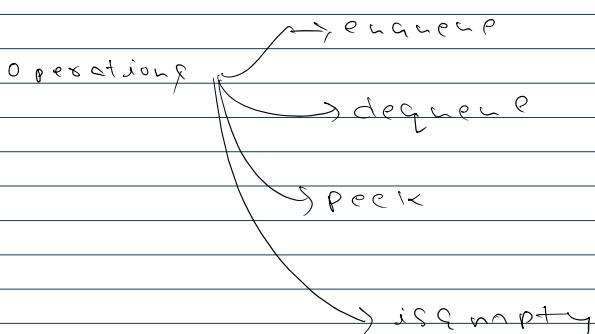
$$\text{top} = -1 \quad \text{size} = \text{top} + 1$$

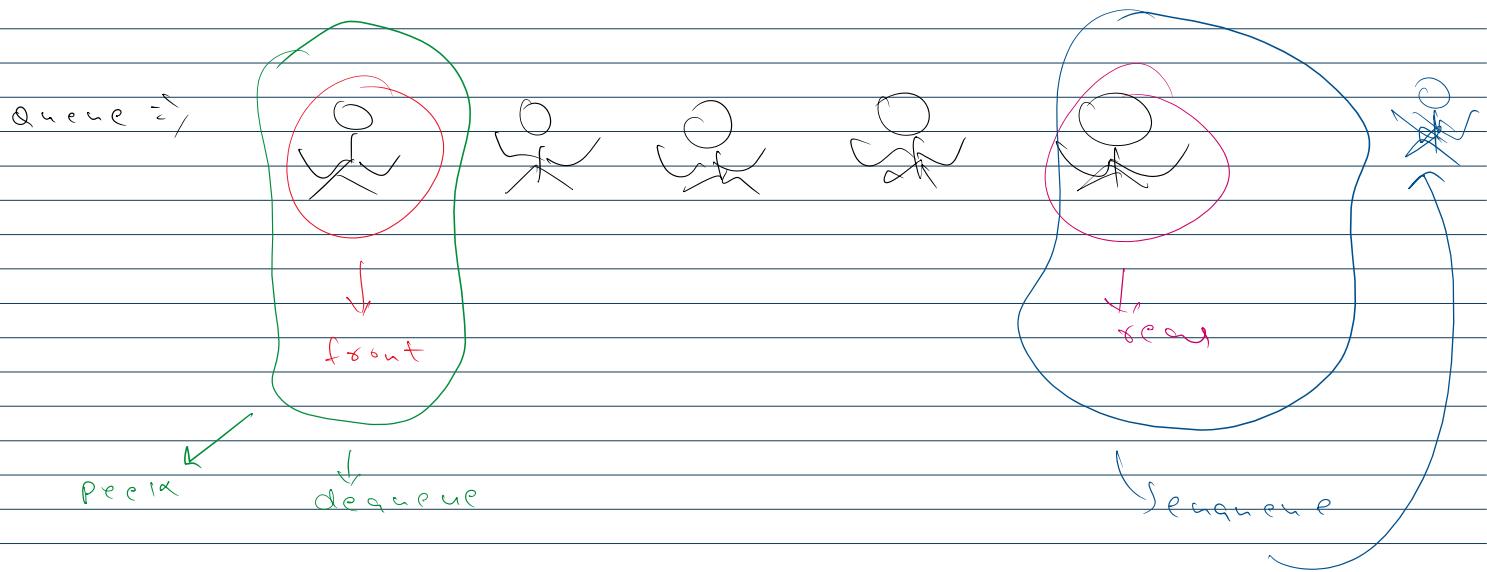


Queue

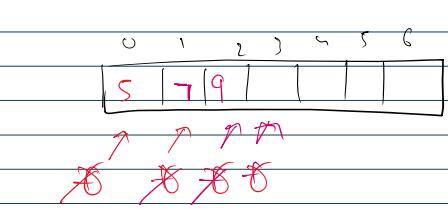
It follows FIFO principle.

\Rightarrow First In First Out





Queue Implementation



```
arr[rear] = ele;
rear++;
```

~~rear = arr[3]~~

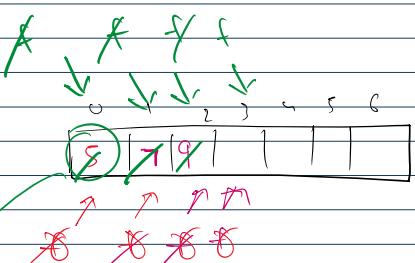
~~front = 0~~

~~arr[5] = ele~~

~~(++)~~

~~arr[7] = ele~~

~~arr[7] = ele~~

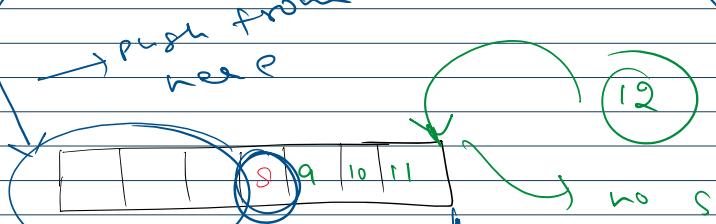


~~rear = arr[3]~~

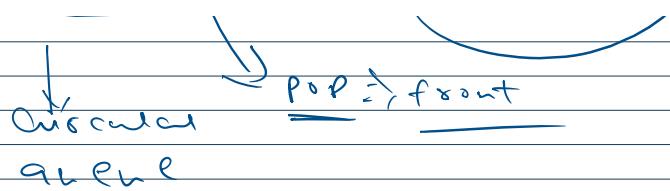
~~front = 0~~

See: arr[front]
 $\text{front}++$
 $\text{size} -$

push from rear



pop = front

discarded  pop -> front

given